CASE REPORT

NECK INJURY WITH QUADRIPLÉGIA: AN AVOIDABLE TRAINING HAZARD

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We report a case of serious neck injury occurring during rugby training; the particular training exercise involved should be avoided.

CASE REPORT

A thirty-seven year old man, taking part in a Rugby Club's regular training session was performing an exercise in which two people stand back to back with arms interlocked and then alternately lift each other off the ground by bending forward (Figs. 1 and 2). During this exercise the pair overbalanced and the patient slipped over his partner's back and fell onto his head (Fig. 3). The interlocked arms prevented him from breaking his fall. The patient was rendered quadriplegic. X-rays showed a fracture-dislocation with bilateral locked facets at the level of the sixth and seventh cervical vertebrae.

COMMENT

There have been several reports of serious neck injury occurring in rugby football matches (Scher, 1977;

Williams and McKibbin, 1978; Hoskins, 1978; Scher, 1981; Burry and Gowland, 1981). Scher (1977) emphasised the danger of compression when the neck is flexed. Williams and McKibbin (1978) also stressed the danger of submitting the neck to flexion forces when movement of the top of the head is restrained by contact with another player or the ground; players should always be able to release bindings readily. In a recent report Scher (1981) presented a case of dislocation of the cervical spine as a result of vertex impact with the neck in the neutral position. In the particular training exercise described above the participants can easily end up in just such a potentially serious position, i.e. upside down with the weight of the body or bodies on the head, the arms locked and unable to break the fall.

In a contact sport there is always a risk of major injury which may involve the neck. Training must give adequate preparation but should not add to the danger of the sport. We strongly recommend that this exercise, which is widely practised for many sports, be discontinued.

Figure 1

Figure 2

Figure 3

REFERENCES

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